

CLAIMS

What is claimed is:

1. An optical component measurement system comprising:

a holding fixture adapted to hold a plurality of optical components in an array; and

an optical detector movably connected to the holding fixture, wherein the detector is movable between a front side of the holding fixture and an opposite rear side of the holding fixture for taking measurements from more than one side of the optical components in the array.
2. An optical component measurement system as in claim 1 further comprising a base section adapted to have the holding fixture connected thereto.
3. An optical component measurement system as in claim 2 wherein the base section comprises a mover for moving the holding fixture on the base section.
4. An optical component measurement system as in claim 3 wherein the mover is adapted to move the holding fixture in a first path of translation and adapted to rotate the holding fixture.
5. An optical component measurement system as in claim 4 wherein the mover is adapted to rotate the holding fixture along at least two axes of rotation.
6. An optical component measurement system as in claim 2 wherein the optical detector is rotatably connected to the base section.

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7. An optical component measurement system as in claim 6 further comprising a vertical mover connected between the optical detector and the base section for vertically moving the optical detector relative to the holding fixture.

8. An optical component measurement system as in claim 2 further comprising an optical energy source emitter movably connected to the base section.

9. An optical component measurement system as in claim 8 wherein the optical energy source emitter is rotatably connected to the base section.

10. An optical component measurement system as in claim 9 further comprising a vertical mover for vertically moving the energy source emitter relative to the holding fixture.

11. An optical component measurement system as in claim 8 wherein the optical energy source emitter comprises a fiber collimator mounted into a mounting arm.

12. An optical component measurement system as in claim 1 wherein the holding fixture comprises:

a frame comprising receiving areas sized and shaped to receive portions of optical components in the array; and

crisscrossing flexible line shaped spacers located on the frame, the flexible line shaped spacers being adapted to be located between adjacent optical components located in the receiving areas to space the adjacent optical components from each other.

13. An optical filter measurement holding fixture comprising:

a frame comprising receiving areas sized and shaped to receive portions of optical filters in an array; and

crisscrossing flexible line shaped spacers located on the frame, the flexible line shaped spacers being adapted to be located between adjacent optical filters located in the receiving areas to position the adjacent optical filters.

14. An optical filter measurement holding fixture as in claim 13 wherein the frame comprises at least two frame members connected together.

15. An optical filter measurement holding fixture as in claim 13 wherein the frame further comprises a window connected to a first one of the frame members and forming a vacuum chamber area between the window and the first frame member.

16. An optical filter measurement holding fixture as in claim 15 wherein the window is connected to the first frame member at an acute angle.

17. An optical filter measurement holding fixture as in claim 15 wherein the frame further comprises a vacuum hose attachment in communication with the vacuum chamber area.

18. An optical filter measurement holding fixture as in claim 14 wherein a first one of the frame members comprises an array of through-holes.

19. An optical filter measurement holding fixture as in claim 18 wherein a first one of the frame members comprises a lapped flat surface.

20. An optical filter measurement holding fixture as in claim 14 wherein a second one of the frame members comprises mounting posts for mounting the flexible line shaped spacers thereon.

21. A method of measuring an optical filter comprising steps of:

mounting the optical filter in a holding fixture, the holding fixture being adapted to hold an array of optical filters;

connecting the holding fixture to a measuring device between an optical emitter and an optical detector or measuring device;

measuring optical transmission through the optical filter; and

moving the optical detector to an opposite side of the holding fixture to measure reflection of the optical filter.

22. A method as in claim 21 wherein the step of mounting the optical filter in a holding fixture comprises positioning a first portion of the optical filter in a hole of a frame, the hole being coupled to a vacuum chamber area.

23. A method as in claim 22 wherein the step of mounting the optical filter in a holding fixture comprises positioning a second portion of the optical filter

24. A method as in claim 21 further comprising vertically moving the optical detector relative to the holding fixture.